Universiti Teknologi MARA

Health Insurance Product Recommendation System Using Fuzzy Logic Technique

Muhamad Harith Khalid Bin Walit

Thesis submitted in fulfilment of the requirements
for
Bachelor of Information Technology (Hons.)
Information Systems Engineering
Faculty of Computer and Mathematical Sciences

January 2017

STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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MUHAMAD HARITH KHALID BIN WALIT
2014395211

JANUARY, 2017

ABSTRACT

This project is developed to recommend the health insurance package that might suitable to the client regarding the client preferences by implementing Fuzzy Logic Technique. Allianz Insurance Berhad (AMB) is chosen as stakeholder for this project. Allianz provides several types of insurance which are General Insurance, Business Insurance and Life Insurance. There are three (3) different user for this system which are the head of branch which has the role as admin in the system, the insurance agent and the potential client that might use the system to view which health insurance package recommended. Currently, the insurance agent are having a problem to recommend the best package to their customer due to every customer has their different preferences that will lead to different type of packages. Therefore, several objectives had been identified in order to minimize the problem. This insurance recommendation system helps the insurance agent and potential customer to check their suitable package by providing the benefit and the percentage of recommendation on the insurance package according to the client uncertainty client preferences such as age, monthly payment and other risks. Fuzzy expert system is implemented in this project because it is more suitable in order to determine the percentage of suitable insurance package based on customer preferences. By using this technique, it is easier to identify and explicit the knowledge to determine suitable insurance package that involved which imprecise and vague data. Sugeno-style inferences are used in the fuzzy expert system because it is well suited for mathematical analysis. As the fuzzy expert system prototype have been developed, the combination of health insurance processed data which is the benefits and package characteristic and rules would produce results based on user's input which are the client preferences. The result of this project depends on the variety of inputs by the user to recommend the suitable insurance package and which is the most recommended. In the future, the system should be improve a lot more widen scope by add other types of insurance package such as properties, travel and transportation package. With the improvement, the system will have much more features that are not limited and can be used in wider perspective.

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